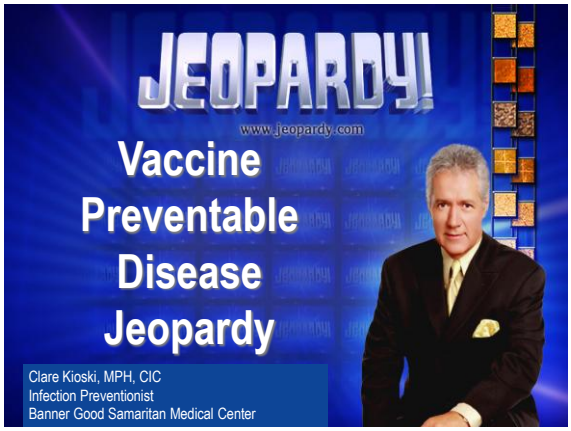
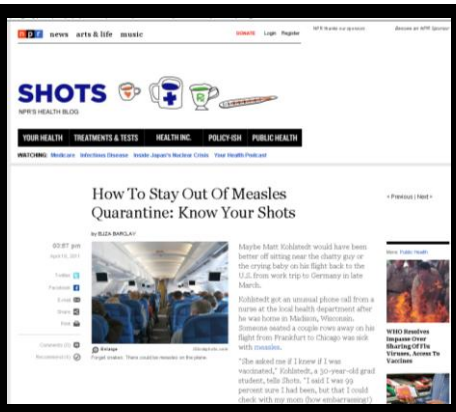


A nine month old child is going to Europe with her parents , which vaccine should she get early?

A. Hepatitis A
B. MMR
C. Varicella
D. PCV
E. None of the Above

- Young children are at greater risk for severe measles, death, or sequelae.
- ACIP recommends children who travel or live abroad should be vaccinated at an earlier age because there is a greater risk of exposure to measles outside the US
- Travelers to the WHO European Region should be aware that measles is endemic in several countries, which was the source of 39% of US measles imports during 2005-2008.



Signs & Symptoms of Influenza like illness (ILI) includes all but the following

A. Fever > 100 F
B. Thirst
C. Cough
D. Sore Throat

Pustular rash illness identified in the Midwest in 2003

A. Chicken pox
B. Monkeypox
C. Ebola
D. Small pox
E. None of the Above

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Which of following vaccines do adults need?

A. Tetanus
B. Pertussis
C. Shingles
D. Influenza
E. Hepatitis A
F. All of the Above

Most common vaccines for adults

Key: Range of age

Vaccine	19-49	50-64	65 and older
Influenza vaccine*	Recommended annually		
Pneumococcal			
Hepatitis A	2 doses (6-month minimum between doses)		
Hepatitis B	3 doses (0, 1 and 6-month schedule)		
Tetanus, diphtheria	1-dose booster every 10 years		
Tetanus, diphtheria plus pertussis	1-dose booster		
Human papillomavirus**			
Zoster (shingles)			Ages 60 and older

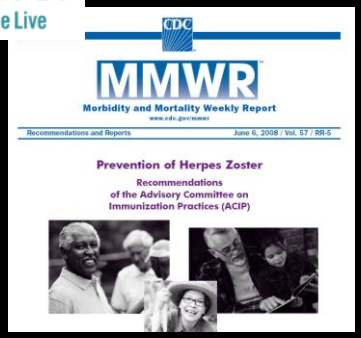
* Spray is available for certain adults
**Recommended for girls and women ages 11-26

SOURCE: Immunization Action Coalition AP

Stanley got shingles on his back when he was 55. She is now 65. Should he get the shingles vaccine?

A. No
B. Yes
C. Yes, only if he is immunocompromised.
D. Perhaps

ZOSTAVAX
Zoster Vaccine Live



Following the massive 2010 Haiti earthquake, which vaccine preventable disease(s) are of major concern?

A. Measles
B. Cholera
C. Tetanus
D. Polio
E. All of the above.

E. All of the Above

- 7.0 magnitude earthquake struck Port-au-Prince Jan 12, 2010.
- 200,000 dead; 300,000 injured; 1.2 million left homeless.
- Severe shortages of food, water, medical supplies, fuel, medical personnel, sanitation equipment, rescue equipment.

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Vaccination Program Following 2010 Haiti Earthquake

- 250,000 children in 7 temporary settlements
  - Measles, diphtheria , rubella, tetanus and pertussis
- Tetanus vaccination of 200,000 people who suffered injuries.
- No Cholera vaccine was given

Cholera Vaccination Shortage

- Limited global vaccine supply
  - 400,000 doses of oral vaccine available world wide
  - A course of vaccination requires 2 doses


Published online 11 April 2011 | Nature | doi:10.1038/news.2011.226
News
Vaccination would curb Haitian cholera
Targeting limited doses on those most at risk could save thousand of lives, say researchers.
Vicki Brower

As of April 4, 2011, PAHO reports 274,418 Haitians have cholera; and 4787 have died.

46 yo Nurse Nancy works in a Family Practice Office. She got her Td booster in 2008. Can she get the Tdap ?

A. No…its too soon after Td shot
B. Yes
C. Don't know
D. Don't care

ACIP Provisional Recommendations for Health Care Personnel on use of Tetanus Toxoid, Reduced Diphtheria Toxoid and Acellular Pertussis Vaccine (Tdap) and use of Postexposure Antimicrobial Prophylaxis

Date of ACIP vote: February 23, 2011
Date of posting of provisional recommendations: April 4, 2011
Scheduled date of publication of recommendations in CDC Morbidity and Mortality Weekly Report: fall 2011 (Immunization of Healthcare Personnel) and 2012 (full pertussis-containing vaccines recommendations)

- ACIP recommends that ALL healthcare personnel (HCP), regardless of age, should receive a single dose of Tdap as soon as feasible if thay have not previously received Tdap and REGARDLESS of the time since the last dose.

Postexposure antimicrobial prophylaxis in Healthcare Personnel

- Some vaccinated HCP are still at risk for *B. pertussis*. *Tdap may not preclude the need for post exposure prophylaxis*.
- Recommend for all HCP who have unprotected exposure to pertussis AND are likely to expose a patient at risk for severe pertussis (e.g., neonate).
- Other HCP should either receive PEP OR be monitored daily for 21 days after pertussis exposure and treated a the onset of signs and symptoms of pertussis.

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Studies show that Measles vaccine is NOT associated with Autism.

A. True
B. False

Autism study linking vaccine to disorder was fraud, report says

Jan. 6, 2011 07:46 AM
Associated Press

LONDON - The first study to link a childhood vaccine to autism was based on doctored information about the children involved, according to a new report on the widely discredited research.

The conclusions of the 1998 paper by Andrew Wakefield and colleagues was renounced by 10 of its 13 authors and later retracted by the medical journal Lancet, where it was published. Still, the suggestion the MMR shot was connected to autism spooked parents worldwide and immunization rates for measles, mumps and rubella have never fully recovered.

A new examination found, by comparing the reported diagnoses in the paper to hospital records, that Wakefield and colleagues altered facts about patients in their study.

Wakefield's article linking MMR vaccine and autism was fraudulent

Clear evidence of falsification of data should now close the door on this damaging vaccine scare

FEATURE, p77

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Harvey Marcovitch associate editor, BMJ, London, UK

Cite this as: BMJ 2011;342:c7452
doi: 10.1136/bmj.c7452

"Science is at once the most questioning and . . . sceptical of activities and also the most trusting," said Arnold Relman, former editor of the *New England Journal of Medicine*, in 1989. "It is intensely sceptical about the possibility of error, but totally trusting about the possibility of fraud."[1] Never has this been truer than of the 1998 *Lancet* paper that implied a link between the measles, mumps, and rubella (MMR) vaccine and a "new syndrome" of autism and bowel disease.

Authored by Andrew Wakefield and 12 others, the paper's scientific limitations were clear when it appeared in 1998.[2] As the ensuing vaccine scare took off, critics quickly pointed out that the paper was a small case series with no controls, linked three common conditions, and relied on parental recall and beliefs.[4] Over the following decade, epidemiological studies consistently found no evidence of a link between the MMR vaccine and autism.[3 5] By the time the paper was finally retracted 12 years later,[6] after forensic dissection at the General Medical Council's (GMC) longest ever fitness to practise hearing,[7] few people could deny that it was fatally flawed both scientifically and ethically. But it has taken the diligent scepticism of one man, standing outside medicine and science, to show that the paper was in fact an elaborate fraud.

In a series of articles starting this week, and seven years after first looking into the MMR scare, journalist Brian Deer now shows the extent of Wakefield's fraud and how it was perpetrated. Drawing on interviews, documents, and data

"study was fatally flawed both scientifically and ethically"

If a 6 mo child received one dose of PCV7, the next pneumococcal vaccine she should receive is:

A. PCV7
B. PVC10
C. PCV13
D. PPSV23

Prevnar 13®
Pneumococcal 13-valent Conjugate Vaccine (Diphtheria CRM_{197} Protein)

CDC

MMWR

Morbidity and Mortality Weekly Report
www.cdc.gov/mmwr

Recommendations and Reports December 10, 2010 / Vol. 59 / No. RR-11

Prevention of Pneumococcal Disease Among Infants and Children — Use of 13-Valent Pneumococcal Conjugate Vaccine and 23-Valent Pneumococcal Polysaccharide Vaccine

Recommendations of the Advisory Committee on Immunization Practices (ACIP)

Most Important way to stop infections from spreading.

A. What is getting vaccinated?
B. What is hand washing?
C. What is disinfecting with bleach?
D. What is none of the above?

Billy got bitten my a rabid fox. How many rabies vaccines does he require?

A. 23
B. 4
C. 5
D. Zero
E. None of the Above

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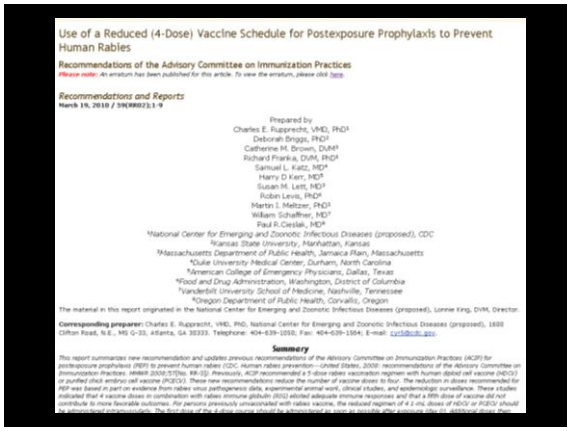
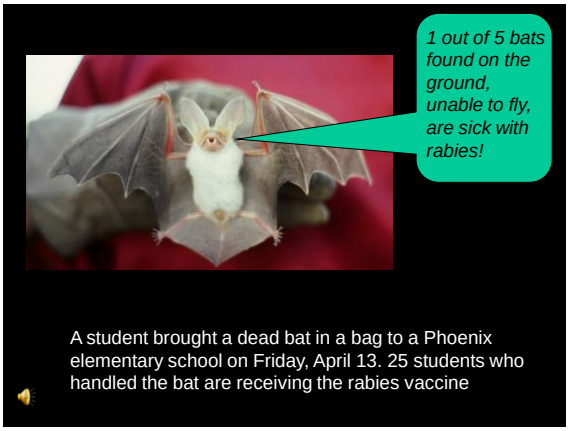


Use of a Reduced (4-Dose) Vaccine Schedule for Postexposure Prophylaxis to Prevent Human Rabies

Recommendations of the Advisory Committee on Immunization Practices

Recommendations and Reports

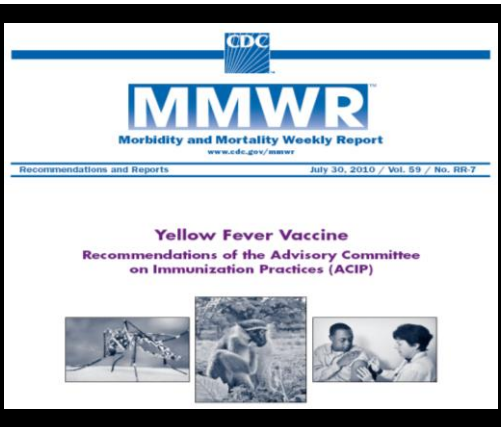
March 19, 2010 / 59(RR02);1-9



A student brought a dead bat in a bag to a Phoenix elementary school on Friday, April 13. 25 students who handled the bat are receiving the rabies vaccine

Which hemorrhagic fever is vaccine preventable?

A. Yellow fever
B. Ebola
C. Marburg
D. Dengue
E. None of the Above



CDC

MMWR

Morbidity and Mortality Weekly Report

www.cdc.gov/mmwr

Recommendations and Reports July 30, 2010 / Vol. 59 / No. RR-7

Yellow Fever Vaccine

Recommendations of the Advisory Committee on Immunization Practices (ACIP)

Which of the following is not a Vaccine?

A. ProQuad
B. Pediarix
C. KidQuad
D. Pentacil
E. Kinrix

Combination Vaccines That Contain IPV

- Pediarix
  - DTaP, Hepatitis B and IPV
- Kinrix
  - DTaP and IPV
- Pentacel
  - DTaP, Hib and IPV

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Use of Combination Measles, Mumps, Rubella, and Varicella Vaccine

Recommendations of the Advisory Committee on Immunization Practices (ACIP)

Recommendations and Reports
May 7, 2010 / 59(RR03);1-12

Prepared by
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The material in this report originated in the National Center for Immunization and Respiratory Diseases, Anne Schuchat, MD, Director, and the Division of Viral Diseases, Larry Anderson, MD, Director; and the National Center for Emerging and Zoonotic Infectious Diseases (proposed), Thomas Hearn, PhD, Acting Director, and the Division of Healthcare Quality Promotion, Denise Cardo, MD, Director.

Corresponding preparer: Mona Marin, MD, National Center for Immunization and Respiratory Diseases, CDC, 1600 Clifton Road NE, MS A-47, Atlanta, GA 30333. Telephone: 404-639-8791; Fax: 404-639-8665; E-mail: mmarin@cdc.gov.

In February, 2008, an ill Pima County visitor from Switzerland spread which disease in 2 counties?

A. Mumps
B. Rubella
C. Measles
D. Chocalholism

What is Measles?

Published: 07.24.2008

SWISS PATIENT STARTED OUTBREAK

Hospital fined for measles isolation delay

Disease allowed to spread; 13 cases eventually confirmed

ALAN FISCHER
Tucson Citizen

Northwest Medical Center agreed to pay a $1,000 civil penalty for failing to quickly follow physician orders to isolate two measles patients earlier this year.

The hospital in February failed to follow a doctor's order to quickly place a patient soon diagnosed with measles in a negative pressure isolation room designed to prevent the spread of infectious diseases, the Arizona Department of Health Services said in a report.

22 cases identified

Vaccine preventable bacterial disease which is also a bioterrorism agent.

A. Anthrax
B. Necrotizing fasciitis
C. *Staphylococcus aureus*
D. Smallpox

Use of Anthrax Vaccine in the United States

Recommendations of the Advisory Committee on Immunization Practices (ACIP), 2009

Recommendations and Reports
July 23, 2010 / 59(rr06);1-30

Prepared by
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Conrad P. Quinn, PhD[1]
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Corresponding preparer: Jennifer Gordon Wright, DVM, CDC, 1600 Clifton Road, NE; MS A-38; Atlanta, GA 30333. Telephone: 404-639-4749; Fax: 404-639-2205; E-mail: jgwright@cdc.gov. The material in this report originated in the National Center for Immunization and Respiratory Diseases, Anne Schuchat, MD, Director.

Substantial changes:
- Reducing the number of doses needs to complete the series from 6 to 5.
- IM rather than subcutaneous AVA administration.

VPD virus which causes blueberry muffin rash.

A. Chickenpox
B. Measles
C. Rubella
D. Meningococcus

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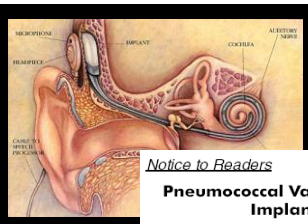
Congenital Rubella Syndrome

- Manifests in infancy from rubella infection *in utero*
- Symptoms/complications include deafness, eye defects, cardiac defects, neurologic abnormalities
- Infants with CRS may transmit rubella in nasopharyngeal secretions and urine through the first year of life

Bacteria sometimes associated with meningitis post implant surgery

A. *Haemophilus influenza* type b
B. *Streptooccus pneumoniae*
C. *Neisseria meningitidis*
D. Group B Streptococcus



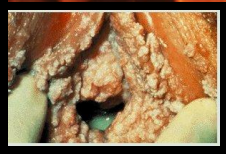
Notice to Readers

Pneumococcal Vaccination for Cochlear Implant Recipients

CDC and the Food and Drug Administration, in collaboration with state health departments, are investigating the occurrence of bacterial meningitis among cochlear implant recipients (*1,2*). The implant, as a foreign body, and the design of the electrode are considered possible risk factors. Other potential risk factors for meningitis among cochlear implant recipients include a history of meningitis (a leading cause of sensorineural hearing loss), a history of recurrent otitis media, immunodeficiency, a pre-existing inner ear abnormality, and an occult cerebrospinal fluid leak.

Vaccine Preventable Sexually Transmitted Disease

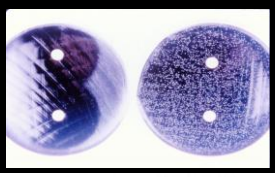
A. Genital herpes
B. Chlamydia
C. Genital warts
D. Syphilis
E. None of the Above



This sound represents which Vaccine Preventable Disease?.

A. Croup
B. Pneumonic plague
C. *Haemophilus influenza*
D. Pertussis
E. Influenza

CDC MMWR MORBIDITY AND MORTALITY WEEKLY REPORT



Epidemiologic Notes and Reports

Erythromycin-Resistant *Bordetella pertussis* — Yuma County, Arizona, May–October 1994

In 1993, a total of 6586 cases of pertussis was reported in the United States, including 70 in Arizona. On June 27, 1994, a case of *Bordetella pertussis* disease caused by a strain resistant to erythromycin was reported to the Arizona Department of Health Services (ADHS) from Yuma County (1990 population: 106,895). Susceptibility testing at CDC confirmed that the isolate was highly resistant to erythromycin with a minimum inhibitory concentration (MIC) >64 µg/mL. The MIC of erythromycin against *B. pertussis* usually ranges from 0.02 µg/mL to 0.1 µg/mL, and resistant isolates have

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Tabitha ,a 16 yo Junior at West High School, got the Meningococcal Conjugate Vaccine when she was 12. Does she need any more doses of MCV before she goes to Phoenix College.

A. Yes, 1 dose
B. No, since she is not going to be living in a dorm
C. Yes, maybe she will get a scholarship to Yale.
D. Don't know or care.

Booster dose added at age 16

Updated Recommendations for Use of Meningococcal Conjugate Vaccines --- Advisory Committee on Immunization Practices (ACIP), 2010

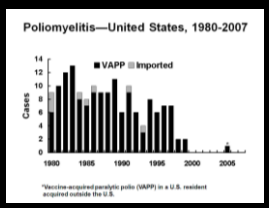
Weekly
January 28, 2011 / 60(03);72-76

On October 27, 2010, the Advisory Committee on Immunization Practi (serogroups A, C, Y, and W-135) meningococcal conjugate vaccines (risk for meningococcal disease. These recommendations supplement t Meningococcal Vaccines Work Group of ACIP reviewed available data i immunization, current epidemiology, vaccine effectiveness (VE), and c Group then presented policy options for consideration by the full ACIP vaccination of adolescents, preferably at age 11 or 12 years, with a b apart for persons aged 2 through 54 years with persistent compleme or anatomic asplenia, and for adolescents with human immunodeficie recommendations also is included.

Rationale for Adding a Booster Dose to the Adolescent Schedule

The last case of vaccine associated paralytic polio occurred in a student who traveled to:

A. Mexico
B. Nigeria
C. Samoa
D. Costa Rica
E. None of the Above

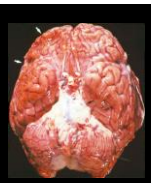


Pneumococcal Polysaccharide Vaccine Should be given to:

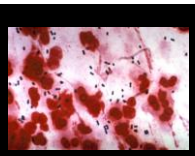
A. Patient with AIDS
B. Patient who had spleen removed due to auto accident.
C. 66 yo nurse
D. 26 yo asthmatic
E. All of the Above

Pneumococcal Bacteremia

- More than 50,000 cases per year in the United States
- Rates higher among elderly and very young infants
- Case fatality rate ~20%; up to 60% among the elderly



Meningitis



- Estimated 3,000 - 6,000 cases per year in the United States
- Case-fatality rate ~30%, up to 80% in the elderly
- Neurologic sequelae common among survivors

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PNEUMOVAX®23
(Pneumococcal Vaccine Polyvalent)

Updated Recommendations for Prevention of Invasive Pneumococcal Disease Among Adults Using the 23-Valent Pneumococcal Polysaccharide Vaccine (PPSV23)

Weekly
September 3, 2010 / 59(34);1102-1106

Invasive disease from *Streptococcus pneumoniae* (pneumococcus) is a major cause of illness and death in the United States, with an estimated 43,500 cases and 5,000 deaths among persons of all ages in 2009 [1]. This report provides updated recommendations from the Advisory Committee on Immunization Practices (ACIP) for prevention of invasive pneumococcal disease (IPD) (i.e., bacteremia, meningitis, or infection of other normally sterile sites [2]) through use of the 23-valent pneumococcal polysaccharide vaccine (PPSV23) among all adults aged >65 years and those adults aged 19–64 years with underlying medical conditions that put them at greater risk for serious pneumococcal infection. The new recommendations include the following changes from 1997 ACIP recommendations [2]: 1) the indications for which PPSV23 vaccination is recommended now include smoking and asthma, and 2) routine use of PPSV23 is no longer recommended for Alaska Natives or American Indians aged <65 years unless they have medical or other indications for PPSV23. ACIP recommendations for revaccination with PPSV23 among the adult patient groups at greatest risk for IPD (i.e., persons with functional or anatomic asplenia and persons with immunocompromising conditions) remain unchanged [2]. ACIP recommendations for prevention of pneumococcal disease among infants and youths aged <18 years using the 13-valent pneumococcal conjugate vaccine (PCV13) and PPSV23 are published separately

Outbreak of this Vaccine Preventable Disease began in Iowa in Spring 2006.

A. Cowpox
B. Mumps
C. Measles
D. Chickenpox
E. Meningococccal Disease

Most important way to prevent infection with the influenza virus.

A. Wash hands
B. Respiratory Hygiene
C. Vaccination
D. Tamiflu
E. All of the Above

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